AMENDMENTS TO THE CLAIMS

1-67. (Cancelled)

68. (New) A method for classification of cancer in an individual having contracted cancer comprising

i) in a sample from the individual having contracted cancer determining the microsatellite status of the tumor and

ii) in a sample from the individual having contracted cancer, said sample comprising a plurality of gene expression products the presence or amount of which forms a pattern, determining from said pattern a prognostic marker, wherein the microsatellite status and the prognostic marker is determined simultaneously or sequentially

iii) classifying said cancer from the microsatellite status and the prognostic marker.

69. (New) The method of claim 68, wherein the prognostic marker is the hereditary or sporadic nature of said cancer the determination of which comprises the steps of

i) in a sample from the individual having contracted cancer, said sample comprising a plurality of gene expression products the presence or amount of which forms a pattern that is indicative of the hereditary or sporadic nature of said cancer

ii) determining the presence or amount of said gene expression products forming said pattern,

iii) obtaining an indication of the hereditary or sporadic nature of said cancer in the individual based on step ii).

70. (New) The method of claim 68, wherein the determination of microsatellite status comprises the steps of

i) in a sample from the individual having contracted cancer, said sample comprising a plurality of gene expression products the presence or amount of which forms a pattern that is indicative of the microsatellite status of said cancer,

ii) determining the presence or amount of said gene expression products forming said pattern,

iii) obtaining an indication of the microsatellite status of said cancer in the individual based on step ii).

71. (New) The method of claim 68, wherein the cancer is colon cancer.

72. (New) The method of claim 68, wherein a plurality of gene expression products are analysed using solid support, having binding partners (hybridisation partners) for said plurality of gene expression products forming a pattern.

73. (New) The method of claim 68, wherein a plurality of gene expression products are analysed using binding partners (hybridisation partners) for said plurality of gene expression products forming a pattern.

74. (New) The method of claim 68, wherein at least two of said plurality of gene expression products forming a pattern are used to determine said microsatellite status are selected individually from a group of genes indicative of microsatellite status.

75. (New) The method of claim 68, wherein at least two of said plurality of gene expression products used to determine the hereditary or sporadic nature of said colon cancer are selected individually from a group of genes indicative for the hereditary or sporadic nature of the cancer.

76. (New) The method of claim 68, wherein at least two of said plurality of gene expression products forming a pattern used to determine said microsatellite status are selected individually from the group consisting of the genes corresponding to SEQ ID NOs: 1-104 and 115-135.

77. (New) The method of claim 68, wherein at least two of said plurality of gene expression products forming a pattern used to determine said microsatellite status are selected individually from the group consisting of the genes corresponding to SEQ ID NOs: 11, 23, 35, 43, 57, 89, 102-104 and 124.

78. (New) The method of claim 68, wherein

i) at least one of said plurality of gene expression products forming a pattern used to determine said microsatellite status is selected from the group of genes consisting of genes corresponding to SEQ ID NOs: 11, 23, 35 and 43

and

ii) at least one of said plurality of gene expression products forming a pattern used to determine said microsatellite status is selected from the group of genes consisting of genes corresponding to SEQ ID NOs: 57, 89, 124 and 102-104.

79. (New) The method of claim 68, wherein

i) at least one of said plurality of gene expression products forming a pattern used to determine said microsatellite status is selected from the group of genes that are down regulated in MSS colon cancers compared to MSI colon cancers consisting of genes corresponding to SEQ ID NOs: 11, 23, 35 and 43

and

ii) at least one of said plurality of gene expression products forming a pattern used to determine said microsatellite status is selected from the group of genes that are up regulated in MSS colon cancers compared to MSI colon cancers consisting of genes corresponding to SEQ ID NOs: 57, 89, 124 and 102-104.

80. (New) The method of claim 79, wherein the difference in the level of the gene expression products forming a pattern is at least one-fold.

81. (New) The method of claim 79, wherein the difference of the level of the gene expression products forming a pattern is at least 1.5 fold.

82. (New) The method of claim 68, wherein at least one of said plurality of gene expression products used to determine the hereditary or sporadic nature of said colon cancer are selected individually from the group consisting of the genes corresponding to SEQ ID NOs: 105-114.

83. (New) The method of claim 68, wherein at least two of said plurality of gene expression products forming a pattern used to determine said hereditary or sporadic nature of colon cancer are the two genes corresponding to SEQ ID NOs: 106 and 107.

84. (New) The method of claim 68, wherein the microsatellite status in an individual having contracted colon cancer is microsatellite instable.

85. (New) The method of claim 68, wherein said colon cancer is of Duke's B or Duke's C stage.

86. (New) The method of claim 68, wherein said colon cancer is an adenocarcinoma, a carcinoma, a teratoma, a sarcoma or a lymphoma.

87. (New) The method of claim 68, wherein the sample is a tissue biopsy.

88. (New) The method of claim 87, wherein the sample is a cell suspension made from the tissue biopsy.

89. (New) The method of claim 68, wherein the expression level is determined by determining mRNA of the sample.

90. (New) The method of claim 68, wherein the expression level is determined by determining expression products in the sample.

91. (New) The method of claim 90, wherein said expression products are peptides or proteins.

92. (New) The method of claim 68, wherein the microsatellite status of the colon cancer in an individual has been determined prior to the determination of the presence or amount of gene expression products.

93. (New) The method of claim 68, wherein the sporadic or hereditary nature of a colon cancer has been determined prior to the determination of the presence or amount of gene expression products.

94. (New) A method for classification of cancer in an individual having contracted cancer, wherein the microsatellite status is determined by a method comprising the steps of

i) in a sample from the individual having contracted cancer, said sample comprising a plurality of gene expression products the presence or amount of which forms a pattern that is indicative of the microsatellite status of said cancer,

ii) determining the presence or amount of said gene expression products forming said pattern,

iii) obtaining an indication of the microsatellite status of said cancer in the individual based on step ii).

95. (New) A method for classification of cancer in an individual having contracted cancer, wherein the hereditary or sporadic nature of the cancer is determined by a method comprising the steps of

i) in a sample from the individual having contracted cancer, said sample comprising a plurality of gene expression products the presence or amount of which forms a pattern that is indicative of the hereditary or sporadic nature of said cancer,

ii) determining the presence and/or amount of said gene expression products forming said pattern,

iii) obtaining an indication of the hereditary or sporadic nature of said cancer in the individual based on step ii).

96. (New) The method of claim 95, wherein the microsatellite status of said cancer is determined simultaneously or sequentially therewith.

97. (New) A method for treatment of an individual comprising the steps of

i) selecting an individual having contracted a colon cancer, wherein the microsatellite status is stable and is determined according to the method of claim 68; and

ii) treating the individual with an anti cancer drug.

98. (New) The method of claim 97, wherein the anti cancer drug is a fluorouracil-based drugs.

99. (New) The method of claim 98, wherein the anti cancer drug is selected from the group consisting of 5-fluorouracil, N-methy-N'-nitro-N-nitrosoguanidine and 6-thioguanine.

100. (New) The method of claim 97, wherein the anti cancer drug is a non-fluorouracil based drug.

101. (New) The method of claim 100, wherein the anti cancer drug is selected from the group consisting of leucovorin, irrinotecan, oxaliplatin and cetuximab.

102. (New) A method for treatment of an individual comprising the steps of

i) selecting an individual having contracted a colon cancer, wherein the microsatellite status is instable and is determined according to the method of claim 68; and

ii) treating the individual with an anti cancer drug.

103. (New) The method of claim 97, wherein the anti cancer drug is campothecin or irinotecan.

104. (New) The method of claim 97, wherein the microsatellite status has been determined by a process selected from the group conssiting of microsatellite analysis, ELISA, antibody-based histochemical staining and immuno histo chemistry.

105. (New) The method of claim 97, wherein the sporadic or hereditary nature of colon cancer has been examined prior to determining the sporadic or hereditary nature of colon cancer by gene expression products forming a pattern.

106. (New) The method of claim 97, wherein the sporadic or hereditary nature of colon cancer has been examined by histological examination of the sample.

107. (New) The method of claim 97, wherein the sporadic or hereditary nature of colon cancer has been examined by genotyping the sample.

108. (New) A method for reducing malignancy of a cell, said method comprising contacting a tumor cell in question with at least one peptide expressed by at least one gene selected from genes being expressed in an at least two-fold higher in tumor cells than the amount expressed in said tumor cell in question.

109. (New) The method of claim 108, wherein the at least one peptide is selected individually from genes comprising a sequence of genes corresponding to SEQ ID NOs: 11, 23, 35 and 43.

110. (New) The method of claim 108, wherein the at least one peptide is selected individually from genes comprising a sequence of genes corresponding to SEQ ID NOs: 57, 89, 102-104 and 124.

111. (New) The method of claim 108, wherein the tumor cell is contacted with at least two different peptides.

112. (New) A method for reducing malignancy of a tumor cell in question comprising,

i) obtaining at least one gene selected from genes being expressed in at least one fold higher in tumor cells than the amount expressed in the tumor cell in question, and

ii) introducing said at least one gene into the tumor cell in question in a manner allowing expression of said gene(s).

113. (New) The method of claim 112, wherein the at least one gene is selected from genes comprising a sequence of a gene corresponding to SEQ ID NOs: 11, 23, 35 and 43.

114. (New) The method of claim 112, wherein the at least one gene is selected from genes comprising a sequence of a gene corresponding to SEQ ID NOs: 57, 89, 102-104 and 124.

115. (New) The method of claim 112, wherein at least two different genes are introduced into the tumor cell.

116. (New) A method for reducing malignancy of a cell in question, said method comprising

obtaining at least one nucleotide probe capable of hybridising with at least one gene of a tumor cell in question, said at least one gene being selected from genes being expressed in an amount at least one-fold lower in tumor cells than the amount expressed in said tumor cell in question, and

introducing said at least one nucleotide probe into the tumor cell in question in a manner allowing the probe to hybridise to the at least one gene, thereby inhibiting expression of said at least one gene.

117. (New) The method of claim 116, wherein the nucleotide probe is selected from probes capable of hybridising to a nucleotide sequence comprising a sequence of a gene corresponding to SEQ ID NOs: 57, 89, 102-104 and 124.

118. (New) The method of claim 116, wherein the nucleotide probe is selected from probes capable of hybridising to a nucleotide sequence comprising a sequence of a gene corresponding to SEQ ID NOs: 11, 23, 35 and 43.

119. (New) The method of claim 116, wherein at least two different probes are introduced into the tumor cell.

120. (New) A method for producing an antibody against an expression product of a cell from a biological tissue, said method comprising the steps of

obtaining expression product(s) from at least one gene said gene being expressed as defined in claim 68,

immunising a mammal with said expression product(s) and obtaining an antibody against the expression product.

121. (New) A method for treatment of an individual comprising the steps of

i) selecting an individual having contracted a colon cancer, wherein the microsatellite status is stable and is determined according to the method of claim 68 and wherein the hereditary nature of said cancer has been determined according to the method of claim 68

ii) introducing at least one gene into the tumor cell in a manner allowing expression of said gene(s).

122. (New) The method of claim 121, wherein the at least one gene is selected from a gene corresponding to SEQ ID NOs: 107 and 136-139.

123. (New) The method of claim 121, wherein at least two different genes are introduced.

124. (New) A pharmaceutical composition for the treatment of a classified cancer comprising at least one antibody as defined in claim 120.

125. (New) A pharmaceutical composition for the treatment of a classified cancer comprising at least one polypeptide as defined in claim 108,

126. (New) A pharmaceutical composition for the treatment of a classified cancer comprising at least one gene as defined in claim 112.

127. (New) A pharmaceutical composition for the treatment of a classified cancer comprising at least one probe as defined in claim 116.

128. (New) Use of the method of claim 68 for producing an assay for classifying cancer in animal tissue.

129. (New) Use of a peptide as defined in claim 108 for preparation of a pharmaceutical composition for the treatment of a cancer in animal tissue.

130. (New) Use of a gene as defined in claim 112 for preparation of a pharmaceutical composition for the treatment of cancer in animal tissue.

131. (New) Use of a probe as defined in claim 116 for preparation of a pharmaceutical composition for the treatment of cancer in animal tissue.

132. (New) A kit for classification of cancer in an individual having contracted cancer, comprising

at least one marker capable of determining the microsatellite status in a sample

at least one marker in a sample determining the prognostic marker, wherein the microsatellite status and the prognostic marker is determined simultaneously or sequentially
and instructions for its use.

133. (New) The kit of claim 132, wherein the marker is a nucleotide probe.

134. (New) The kit of claim 132, wherein the marker is an antibody.

135. (New) The kit of claim 132, wherein the genes are selected from the group consisting of genes corresponding to SEQ ID NOs: 1-104 and 115-135; genes corresponding to SEQ ID NOs: 11, 23, 35, 43, 57, 89, 102-104 and 124; at least one gene selected from genes corresponding to SEQ ID NOs: 11, 23, 35 and 43 and at least one gene selected from genes corresponding to SEQ ID NOs: 57, 89, 124 and 102-104; genes corresponding to SEQ ID NOs: 105-114; and genes corresponding to SEQ ID NOs: 106 and 107.